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ABSTRACT

[0027] A system and method for physical vapor deposition (PVD) of dielectric material characterized by the conversion of a beam of positively charged ions into a beam of neutral particles, said beam of neutral particles being directed to bombard a sputtering target. In operation, sputtering targets comprised of low-k dielectric material can be successfully sputtered by such a beam of neutral particles, allowing for the integration of low-k dielectric materials into the on-chip wiring of semiconductor devices.